

REMARKS

Claims 1-3, 7-12, 15, 18-20, 23, and 26-32 are now pending in the application. Claims 1, 18, and 28 have been amended herein. New Claims 31 and 32 have been added. The amendments and new claims do not present new matter. Claims 13, 14, 16, 17, 21, 22, and 24 were previously withdrawn from consideration. Claims 16 and 17 have been cancelled herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-3, 7-12, 15, 18-20, and 26-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pataille* (U.S. Pat. No. 6,520,507) in view of *Chmielewski* (WO 01/98405). This rejection is respectfully traversed.

At the outset, Applicants note that independent Claims 1, 18, and 28, from which the remaining claims depend, have been amended herein to recite a continuous phase thermoplastic matrix comprising a non-fluorine containing polymeric material. Antecedent support for this amendment can be found at least in Claim 16 (now cancelled) and paragraph [0068] of the application as originally filed.

As the office action states, the *Pataille* reference, relied upon for the disclosure of a seal assembly and related physical characteristics, does not disclose the claimed vulcanized fluorocarbon elastomer dispersed in a thermoplastic material matrix. The office action relies on the *Chmielewski* reference to provide a material having the required “materials and properties” while alleging that the submitted material would also have the claimed tan-delta and loss to storage ratio. Applicants respectfully maintain, however, that the *Chmielewski* reference does not teach, disclose, or suggest the use of a continuous phase thermoplastic matrix comprising a

non-fluorine containing polymeric material as recited in amended Claims 1, 18, and 28. Rather, *Chmielewski* merely discloses the use of a fluorocarbon resin as the thermoplastic phase and a blend of two or more fluorine containing elastomers as the dispersed elastomeric phase (*see, e.g.*, page 10), apparently for the known compatibility of the combination of a resin and an elastomer both having fluoride units (*see, e.g.*, page 7). The compositions of Examples 1 and 2 specifically include the use of THV 610X, which is a thermoplastic fluorocarbon commercially available from Dyneon LLC (Oakdale, Minn.). Applicants respectfully submit that *Chmielewski* does not otherwise teach, disclose, or suggest the use of a thermoplastic matrix comprising a non-fluorine containing polymeric material in order to improve the seal assembly properties. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

Applicants further note the addition of new dependent Claims 31 and 32. New Claims 31 and 32 further recite the annular seal as being post cured by continued mixing of the elastomer and the thermoplastic during a cool-down period. Support for these new claims can be found at least in paragraph [0065] of the application as originally filed. Applicants respectfully maintain that neither *Pataille* nor *Chmielewski* teach, disclose, or suggest such a formulation that is post-cured to provide and/or enhance the claimed properties.

Claim 23 stands rejected under 35 U.S.C. 103(a) as being unpatentable over *Pataille* in view of *Chmielewski*, and further in view of *Johnston* (U.S. Pat. App. Pub. No. 2002/0158421). This rejection is respectfully traversed.

Applicants note that Claim 18, from which Claim 23 depends, has been amended and is believed to be in allowable form for at least the reasons discussed above. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

Applicants submit that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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